Brief Introduction

Many thanks for purchasing 10/100/1000M Ethernet optical transceiver! This product supports IEEE802.3UIEEE802.3z 1000Base-Tx/Fx Protocol, as well as full duplex and half duplex mode. This manual is for 10/100/1000M transceivers. The following purchasing guide is for customer's reference.

Media Converter

MM/10/100/1000Mbps/DUPLEX/SC/550M

MODEL:MD-MMSCUP-1000-00550

Packing List

Please check the following items in the package before installing the transceiver.

Ethernet Optical Transceiver	1 set
AC/DC Adapter	1 pcs
User Manual	1 copy

Please contact the dealer immediately for any loss or damage to the above items

Installation

1. Interface

- RJ-45 interface

The transmission media adopts CAT5 twisted-pair with typical length of 100 meters. It features the function of automatically identifying the through line and cross wire

- Fiber interface

FC/SC fiber interface is of duplex mode type, including two interfaces, namely TX and RX. When the two sets of optical transceiver are interfaced or connected to switch with fiber interface, the fiber is in cross connection, namely "TX-RX", "RX-TX" (direct butting for single optical fiber).

2. Connection

The network device (work station, hub or switch) with RJ-45 interface is connected to RJ-45 jack of optical transceiver through twisted-pair. And the multi/single mode fiber is connected to FC/SC fiber interface of the optical transceiver. Then optical converter on. The corresponding LED is on for correct connection. (See the table below for the LED indicator lamp)

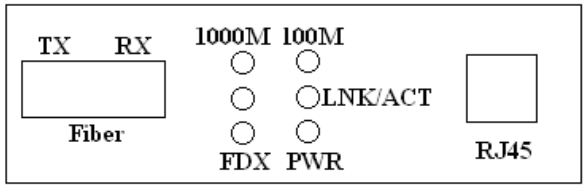
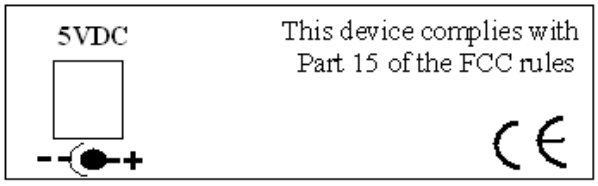


Figure 1 Schematic drawing of connection



LED Indicator Lamp

LED indicator lamps serve as device monitoring and trouble display. The following is the explanation for each LED indicator lamp.

LED indicator lamp	Status	Explanation
Link/Act	On	Connection status display for link. "ON" indicates that link is in correct connection.
	Blink	Active status display of fiber port or RJ45 port "Blink" indicates packet goes through media converter
FDX	On	Transceiver works in the full duplex mode.
	Off	Transceiver works in the half duplex mode.
PWR	On	Power is on and normal.
1000	On	Transfer rate of electric interface is 1000Mbps.
100	On	Transfer rate of electric interface is 100Mbps.

Transmission characteristics of single fiber transceiver

Product model	Optical wavelength (nm)	Transmitting optical power(dbm)	Receiving sensitivity (dbm)	Saturability (dBm)
MEDIA SM/10/100/ 1000/SIMPLE X/ 20KM	1310/1550 1550/1310	-6-10	-23	≥-3
MEDIA SM/10/100/ 1000/SIMPL EX/40KM	1310/1550 1550/1330	-5-0	<-24	≥-3
MEDIA SM/10/100/ 1000/SIMPL EX/60KM	1310/1550 1550/1330	-2-+3	<-24	≥-3

Transmission characteristics of dual fiber transceiver

Product model	Optical wavelength (nm)	Optical power(dbm)	Sensibility (dbm)	Saturability (dbm)
MEDIA /MM/10/100/ 1000/DUPLEX /550M	1310	-10 ~ -4	-17	≥-3
MEDIA /SM/10/100/1 000/DUPLEX/ 20KM	1310	-10 ~ -6	-23	≥-3
MEDIA /SM/10/100/1 000/DUPLEX/ 40KM	1310	-4 ~ 0	-24	≥-3
MEDIA /SM/10/100/1 000/DUPLEX/ 60KM	1310	-5 ~ -0	-25	≥-3

Main Features

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1. In conformity to IEEE 802.3 10 Base-T standard.In conformity to IEEE 802.3u 100 Base- TX,IEEE802.3z,IEEE802.3abstandard
2. Built in high efficiency SRAM for packet buffer, with 1K-entry lookup table and 4-way associative hash algorithm.
3. Half duplex: Back pressure flow control
   Full duplex: IEEE802.3x flow control
4. Automatic identification of MDI/MDI-X cross line..
5. In conformity to safety code of FCC and 15 CLASS A and CE MARK.

Technical Parameters

1. Standard Protocol:

IEEE802.3 10 Base-T standard

IEEE802.3u100Base-TXand

IEEE802.3zstandard

2.Connector:oneUTPRJ-45connector,

oneFC/SC connector

3. Operation mode: full duplex mode or half duplex mode

4. Power supply parameter:

   INPUT: AC/220V OR DC/48V

   OUTPUT: 5V DC 1A

5. Environmental temperature: 0℃-60 ℃

6. Relative humidity: 5%-90%

   TP cable: Cat5 UTP cable

7. Transfer fiber:

multi-mode: 50/125, 62.5/125 or 100/140μm

single mode: 8.3/125, 8.7/125, 9/125 or 10/125μm

8. Dimensions: 94x 71 x 26(mm)L*W*T

Cautions

1. This product is suitable for indoor application.
2. Put on the dust cover of fiber interface when not used.
3. It is forbidden to stare at the TX fiber-transfer end with naked eyes.
4. Single optical fiber transceiver must be used in pair (See the attachment description in delivery).

Trouble Shooting

1. Device is not matched. Please select the corresponding network device according to the transfer rate of the product (10Mbps or 100Mbps,1000Mbps)when connected to other network devices (network card, hub, switch).
2. Line loss is excessive during the fiber wiring. Excessive loss in connector plug-in and fiber soldering welding, and excessive intermediate nodes may cause excessive loss rate or abnormal operation.

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